1861MNRAS..22...46H

kept the star pretty constantly in view; and the discussion and projection of my observations give October 27th as the epoch of *minimum*, just two days prior to the date of probable *maximum*, as given in Mr. Pogson's ephemeris. The magnitude at minimum appears to have been about 13·6.

As this is the first communication I have had the honour of submitting to the Astronomical Society, it will probably be deemed desirable that I should briefly describe my instrument and method of observing variable stars.

My Observatory is furnished with a 9-foot equatoreal, the object-glass by Messrs. Alvan Clark and Sons, and of 7⅓ inches aperture. It was formerly in the possession of the Rev. W. R. Dawes, and was very favourably spoken of by him—a sufficient guarantee of its quality. I usually employ an excellent positive eyepiece, constructed for me by Mr. Dollond; it has a large field, and gives a magnifying power of 60, as determined by measuring the emergent pencil. Higher magnifiers are occasionally employed.

In observing and discussing observations of variable stars, I have adopted Mr. Pogson's methods, as also his magnitude-scale (Argelander's extended). I am largely indebted to him, not only for his interesting and important papers in the *Astronomische Nachrichten* and the *Monthly Notices*, but also for several valuable hints in one or two personal communications with which he has favoured me. In all probability I am not the only amateur who is eagerly expecting his promised *Variable Star Atlas*.

Observations of Comet II. 1861, *taken with the Equatoreal of the Liverpool Observatory.* By J. Hartnup, Esq.

1861.	G.M.T. h m s	Comet's R.A. h m s	Log. $\frac{p}{P}$	Comet's N.P.D. ° ′ ″	Log. $\frac{q}{P}$	Stars of Comp. B.A.C.
July 3	10 44 32·7	9 42 13·06	+8·950	24 5 59·1	−9·7407	3496
3	11 21 16·0	9 44 3·75	+8·910	24 2 49·5	−9·7955	,,
4	10 54 4·6	10 50 43·43	+8·999	23 5 31·0	−9·6858	3647
4	11 25 20·0	10 52 4·32	+8·985	23 5 33·0	−9·7790	,,
4	11 56 34·8	10 53 25·01	+8·962	23 5 38·1	−9·8644	,,
5	11 8 34·1	11 46 10·28	+8·996	23 40 24·6	−9·5207	3968
5	11 29 11·1	11 46 50·71	+8·993	23 41 20·6	−9·5831	,,
5	11 49 48·5	11 47 31·40	+8·987	23 42 20·9	−9·6337	,,
6	10 3 56·4	12 25 23·85	+8·938	24 54 1·5	−9·0806	4276
6	10 24 23·6	12 25 53·65	+8·953	24 55 15·0	−9·2173	,,
6	10 44 50·5	12 26 23·61	+8·963	24 56 30·5	−9·3213	,,
7	10 24 25·2	12 55 52·79	+8·909	26 26 4·5	−9·1219	4300
7	10 54 53·7	12 56 24·84	+8·931	26 28 3·7	−9·2909	4276

Downloaded from http://mnras.oxfordjournals.org/ at New York University on June 23, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

1861MNRAS..22...46H

1861.	G.M.T.	Comet's R.A.	Log. $\frac{p}{P}$	Comet's N.P.D.	Log. $\frac{q}{P}$	Stars of Comp. B.A.C.
	h m s	h m s		° ′ ″		
July 7	11 25 21·4	12 56 57·20	+8·944	26 30 6·0	−9·4211	4276
8	10 58 56·3	13 18 27·06	+8·899	27 58 53·4	−9·2692	4392
8	11 24 13·0	13 18 46·90	+8·914	28 0 29·3	−9·3821	,,
Sept. 1	10 12 11·3	15 34 31·60	+8·729	46 30 14·5	−9·6909	5287
1	10 37 8·7	15 34 32·56	+8·737	46 30 21·4	−9·7283	,,
3	8 52 44·6	15 36 47·77	+8·671	46 40 48·6	−9·5688	,,
3	9 12 43·0	15 36 48·59	+8·692	46 40 50·8	−9·6042	,,

The observations are corrected for refraction. The corrections to be applied for parallax in time and arc are represented by p and q; P is the equatoreal horizontal parallax. The following are the assumed mean places of the stars of comparison for 1861, Jan. 0.

	R.A.	N.P.D.	Authority.
	h m s	° ′ ″	
B.A.C. 3496	10 7 53·88	24 12 1·54	Greenwich and Oxford Obs.
,, 3647	10 32 25·51	23 33 25·95	,, ,, ,,
,, 3968	11 34 41·03	22 29 9·61	British Association Catalogue.
,, 4276	12 35 28·67	26 31 24·03	,, ,, ,,
,, 4300	12 41 21·66	26 27 33·40	,, ,, ,,
,, 4392	13 0 53·52	27 12 43·14	,, ,, ,,
,, 5287	15 50 0·14	46 27 17·79	,, ,, ,,

Variations in the Light of η Argus, observed at Madras from 1853 to 1861. By Eyre B. Powell, Esq.

Mr. Powell writes that he has been engaged, off and on, during the last four years in watching the nebula about η *Argus*, and in taking micrometrical observations of the neighbouring stars; consequently his attention has been very much directed to that part of the heavens, and the estimations of the magnitude of that star have been made with very great care. The observations are as follows:—

1853·991. η *Argus* slightly inferior to α *Centauri*, but superior to either α *Crucis* or β *Centauri*.

1854·076. Inferior to α but superior to β *Centauri*. Rays issue from η as from *Rigel*.

1855·967. Not brighter than *Procyon*, and not quite so bright as *Capella*; scarcely brighter than α *Crucis*, about equal to β *Centauri*. Colour reddish or yellowish white; star scintillates.

1856·012. Scarcely brighter than β *Centauri*, a trifle brighter than α *Crucis*; scintillates more than either, and is reddish. Perhaps equals β *Centauri*, but, being reddish, strikes the eye more.

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System